

Division of Solid & Hazardous Waste
P.O. Box 414
Trenton, New Jersey 08625-0414
Tel. # (609) 984-6900
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SANITARY LANDFILL FACILITY PERMIT

Under the provisions of N.J.S.A. 13:1E-1 et seq. known as the Solid Waste Management Act, this solid waste facility permit is hereby issued to:

HACKENSACK MEADOWLANDS DEVELOPMENT COMMISSION

FACILITY NAME:	HMDC 1-E Landfill - North Area
FACILITY TYPE:	Class II Sanitary Landfill
FACILITY NO.:	0907W
BLOCK & LOT NOS.:	block 149, lot 10
MUNICIPALITY:	Kearny
COUNTY:	Hudson
BLOCK & LOT NOS.:	blocks 175-183; 185-189, lot 1
MUNICIPALITY:	North Arlington
COUNTY:	Bergen
EXPIRATION DATE:	December 21, 2002

This Permit is subject to compliance with all conditions specified herein and all regulations promulgated by the Department of Environmental Protection as same may be amended in the future. Any references herein to specific regulations include any future amendments thereto.

This Permit shall not prejudice any claim the state may have to riparian land, nor does it allow the Permittee to fill or alter or allow to be filled or altered in any way, lands that are deemed to be riparian, wetlands, stream encroachment areas or flood plains, or that are within the Coastal Area Facility Review Act (CAFRA) zone or are subject to the Pinelands Protection Act of 1979, nor shall it allow the discharge of pollutants to waters of this state without prior acquisition of the necessary grants, permits or approvals from the Department of Environmental Protection.

Compliance with the terms of this Permit does not relieve the Applicant of the obligation to comply with all applicable state and federal statutes, rules and other permits.

Failure to comply with all of the conditions specified herein may result in revocation of this Permit and/or other regulatory or legal actions which the Department is authorized to institute by law.

This Permit is non-transferable without approval from the Department pursuant to N.J.A.C. 7:26-2.7(e).

December 22, 1997
Date of original issuance

Signed By Thomas Sherman, Assistant Director
Thomas Sherman
Assistant Director
Office of Permitting and Technical

Programs
November 30, 1999
Revised date

April 25, 2000
Revised date

Solid Waste Facility Permit for the operation of the Class II Sanitary Landfill known as the "North Area" located on the existing Hackensack Meadowlands Development Commission (HMDC) 1-E Landfill. This Permit is contingent upon compliance with and implementation of the following:

A. GENERAL CONDITIONS

1. Permitted Waste Types (Revised 11/20/99)

The following solid waste materials, as identified by waste I.D. numbers and defined in N.J.A.C. 7:26-2.13(g), may be accepted for disposal at the landfill:

<u>I.D.</u>	<u>Waste</u>
13	Bulky waste
13C	Construction and demolition waste
23	Vegetative waste except leaves pursuant to N.J.S.A. 13:1E-99.21
27	Dry industrial waste
27A	Waste material consisting of asbestos or asbestos containing waste

2. Prohibited Waste Types (Revised 11/30/99)

The following solid waste materials, as identified by waste I.D. numbers and defined in N.J.A.C. 7:26-2.13(g) and (h), may not be accepted for disposal at the landfill:

<u>I.D.</u>	<u>Waste</u>
10	Municipal Waste (household, commercial and institutional)
12	Dry sewage sludge
25	Animal and food processing waste
27I	Waste material consisting of ash or ash containing waste
72	Bulk liquid and semi-liquids
73	Septic tank clean-out wastes
74	Liquid sewage sludge

Regulated Medical Waste Class 1 through 7 as per N.J.A.C. 7:26-3A.5
Hazardous Waste as defined, identified or otherwise classified in N.J.A.C. 7:26G-5
Recyclable Materials as designated in the HMDC Recycling Plan

3. Recyclables

Recyclable materials designated in the HMDRC Recycling Plan to be source separated in each municipality pursuant to N.J.S.A. 13:1E-99.11 et seq. shall not be accepted for disposal at the landfill.

Any recyclable materials described above, detected in a load of waste accepted at the facility shall be handled pursuant to the Operations and Maintenance Manual.

4. Haulage Vehicles

Only vehicles properly registered, pursuant to N.J.A.C. 7:26-3, with the Department, unless exempt from the registration requirements pursuant to N.J.A.C. 7:26-3.3, and displaying the appropriate registration number shall be admitted for unloading of any solid waste at the facility. The facility shall be operated in accordance with N.J.A.C. 7:26-2.11.

5. Waste Delivery Haul Routes

All solid waste collection/haulage vehicles shall enter the facility via the paved access road from Belleville Turnpike and proceed to the scalehouse.

6. On-Site Traffic Control

On-site traffic control measures shall be implemented to provide for orderly vehicle movement on the facility grounds. The measures implemented shall include the appropriate use of lane delineations, signals and signs. All on-site roadways, except for the temporary roads on the active areas of the landfill, shall be constructed and maintained to withstand heavy vehicle usage.

7. Unauthorized Waste

A program shall be established and maintained for detecting and preventing the disposal of regulated hazardous waste and other unauthorized waste. The program shall include the random inspection of incoming loads, recording any inspections, and training of facility personnel to recognize regulated hazardous waste. The program shall include the following:

- a. Any truck suspected of hauling hazardous waste shall be stopped and inspected. Any vehicle found to be carrying a hazardous waste material as defined at N.J.A.C. 7:26G-5 shall not be permitted to dump at the facility.
- b. Facility personnel shall conduct continuous visual monitoring of the discharged waste. Any suspected unacceptable waste shall be removed from the processing stream.

- c. Any regulated medical waste delivered to the facility shall be handled as described in the Operations and Maintenance Manual prepared for the facility. Any suspected hazardous waste or liquids found in a load accepted at the facility shall not be returned to the generator. Such material shall be segregated and stored in a secure manner and the discovery of any such wastes at the facility shall immediately be brought to the attention of the NJDEP Bureau of Solid Waste Compliance and Enforcement - Northern Region, at (609) 584-4180. After-work hours and weekend (or holiday) incidents shall be immediately reported to the NJDEP Environmental Action Line at (888) WARN DEP. The Permittee shall secure the name of the collector/hauler suspected of delivering such waste to the facility and related information surrounding the incident, if available, and shall make this information known to the Department's enforcement personnel.

This program shall be included in the final Operations and Maintenance Manual prepared for the landfill.

8. Vector Control

The sanitary landfill shall be operated in a manner which minimizes the propagation and harborage of insects, rodents and birds. Cover material shall be applied as needed to control vectors. If vectors still present a problem, the Permittee shall implement a program in compliance with the requirements of the New Jersey Pesticide Control Code, N.J.A.C. 7:30, by an applicator of pesticides certified in accordance with N.J.A.C. 7:30.

9. Noise Control

Noise control shall be implemented so that noise levels generated by the landfill operation shall not exceed the standards set forth by the New Jersey Noise Control Regulations at N.J.A.C. 7:29-1.2.

10. Odor Control

The operation of the facility shall not cause any air contaminant, including an air contaminant detectable by the sense of smell, to be present in the outdoor atmosphere in such quantity and duration which is, or tends to be, injurious to human health or welfare, animal or plant life or property, except for malodorous emissions emanating from the sanitary landfill which result in odors in areas over which the owner and/or operator has exclusive use or occupancy. Malodorous emissions emanating from the facility shall not result in odors being detectable in an area of human use or occupancy beyond the property boundary line.

Malodorous emissions shall be controlled by the use of daily cover at the landfill. In the event that this is not satisfactory, a suitable deodorant shall be used. Malodorous solid waste shall be covered immediately after unloading with a minimum of six inches of earthen cover or approved alternate cover material.

11. Fire Safety

An adequate water supply and/or fire fighting equipment shall be readily available on-site or on-call to extinguish any and all fires. In case of a fire, the Permittee shall immediately notify the local police and fire department having jurisdiction and the NJDEP action line at (888) WARN DEP. The Permittee shall be responsible for initiating and continuing fire-fighting actions until all smoldering, smoking and burning ceases. The Permittee shall seek and obtain fire-fighting assistance if smoldering, smoking or burning persists for longer than 24 hours. The Permittee shall ensure that local fire companies are thoroughly versed in the emergency plan of action for a fire at the facility. Specific procedures shall be outlined in the final Operations and Maintenance Manual for the landfill.

12. Security and Facility Access Control

Admittance to the site shall be limited to facility personnel and authorized visitors only. Access to the landfill is restricted to the entrance and exit bridges which cross the wetlands separating the site from Belleville Turnpike. Access gates, at the landfill's entrance and exit bridges, shall be locked when the landfill is not in operation.

The existing fence, gates and access roads shall be maintained in accordance with the Operations and Maintenance Manual.

13. Hours of Operation

The facility is open for the disposal of solid waste from 6:00 A.M. to 4:30 P.M., Monday through Friday, and from 6:00 A.M. to 4:00 P.M. on Saturday. The Complex shall be closed Sundays and holidays as defined in the facility's Operations and Maintenance Manual.

14. Safety Procedures

A copy of the operating safety procedures shall be posted on-site. The Permittee shall follow the Occupational Safety and Health Administration (OSHA) standards in the construction and operation of this facility for the safety of contractors, employees and other persons entering the premises.

Additionally, appropriate facility staff shall be trained to effectively respond to any equipment malfunction or emergency situation that may arise during facility operation.

15. Housekeeping

Routine housekeeping and maintenance procedures shall be implemented within the facility interior to prevent the accumulation of dust and debris on the public roads and to

maintain general cleanliness in the working environment.

Litter at the landfill shall be controlled via moveable fences of sufficient height or by an equivalent means. The litter fence shall be policed daily, and the litter collected shall be properly disposed of at the working face of the landfill.

Dust control at the landfill shall be affected by the spraying of water or the spreading of calcium chloride or an equivalent method approved by the Division as needed. Spraying of waste oil is prohibited.

Mud, soil, or other materials shall not be tracked onto any public roads by exiting vehicles. Effective measures shall be implemented to comply with this condition. If these measures prove ineffective in controlling soil tracking, the Permittee shall remove all soil or other materials from the tires of exiting vehicles by means of a high-pressure steam (or water) cleaning apparatus or with a rumble rack.

16. Facility Personnel Training

All personnel who are directly involved in facility waste management activities or who operate, service or monitor any facility equipment, machinery or system shall successfully complete an initial program of classroom or on-the-job training which includes instruction in the operations and maintenance of equipment, machinery and systems and which teaches them to perform their duties in a manner that ensures the facility's compliance with the requirements of N.J.A.C. 7:26 and the conditions of all Department permits issued to the facility.

The training program shall ensure that appropriate facility personnel are able to effectively respond to any equipment malfunction or emergency situation which may arise. The training program shall provide instruction in the use of safety equipment, procedures for inspecting and repairing facility equipment, machinery and monitoring systems and the procedures to be followed during planned or unplanned shutdown of operations.

The training program shall require constant monitoring of incoming loads and shall include instruction related to identification and proper handling of suspected unauthorized waste types. Instruction in fire training and noise awareness shall be provided to appropriate personnel.

17. Facility Staffing

The facility shall maintain sufficient staff to ensure proper, orderly and safe operation of all materials handling, processing, monitoring and control, safety, emergency and security equipment items. Concurrently, the level of staffing shall provide the capability to handle all routine facility maintenance requirements and to respond to all emergency situations.

A fully trained and qualified foreman or supervisor who is designated and authorized by

the Permittee to direct and implement all operational decisions shall be present at the facility during all operating hours.

18. Emergency Actions

In the event of an emergency, all measures outlined in N.J.A.C. 7:26-2A.8(b)42 shall be followed. The Department shall be notified immediately at (888) WARN DEP. Emergency measures are also listed in the approved Operations & Maintenance Manual for this facility.

19. Plans On-Site

A copy of the approved engineering designs, the engineering reports, the final Operations and Maintenance Manual, the operations record and a copy of this Permit shall be kept at the facility and shall be made available for inspection by Department personnel or its designated representatives.

20. Duration of Permit

This Permit shall be effective for a maximum period of five (5) years from the date of its issuance. This Permit may be renewed at that time upon the proper application, in accordance with the procedures outlined in N.J.A.C. 7:26-2.7(b).

21. Right of Entry

The Permittee, by acceptance of this permit, hereby authorizes entry by Department representatives to make whatever inspections, searches, or examinations are deemed necessary by those representatives to determine the extent of compliance with any conditions of this Permit.

22. Operations Record

The management of all waste received for disposal shall be consistent with the Hackensack Meadowlands District Solid Waste Management Plan pursuant to N.J.A.C. 7:26-6.12. The Permittee shall maintain records of the facility's operations on a daily basis. Monthly summaries shall be submitted, before the 20th of each month following the month for which the information was recorded, to:

New Jersey Department of Environmental Protection
Division of Solid and Hazardous Waste
Bureau of Recycling and Planning
PO Box 414
Trenton, New Jersey 08625-0414

The information shall include, but is not limited to, the following:

- a. The weight of solid waste delivered to the facility for each waste type permitted by this Permit;
- b. The volume or tonnage of waste flow, reported by type, from each municipality;

Where applicable, the information required to be recorded in the daily record shall be supplied by the collector/hauler to the facility operator on the waste origin/waste disposal (O&D) forms (or duplicates of the same). The O&D forms shall be kept by the Permittee for a minimum of three (3) years and shall be made available for inspection by the appropriate representative of the Department upon request. The information provided on the daily records, O&D forms and monthly summaries shall be in compliance with N.J.A.C. 7:26-2.13.

B. DESIGN AND CONSTRUCTION

1. Final Cover

The final cover for the North Area shall be the same as the final cover for the rest of the 1-E landfill. The cap shall be in conformance with all federal, state and local regulations.

The final cover shall be stabilized by the establishment of vegetative cover in accordance with the Soil Erosion and Sediment Control Plan. Final cover shall be applied within six (6) months to any area where final elevations have been achieved.

2. Ground and Surface Water Monitoring

The location, sampling and analyses of all ground water monitoring wells and surface water discharges shall be in accordance with the approved New Jersey Pollutant Discharge Elimination System (NJPDES) Permit for the landfill.

3. On-Site Baseline

In accordance with N.J.A.C. 7:26-2A.7(a)2, an on-site baseline consisting of two vertical and horizontal control monuments shall be maintained.

4. Landfill Gas Venting and Monitoring

A methane survey shall be performed at 300-foot intervals around the perimeter of the landfill's buffer zone on a quarterly basis. Test results shall be submitted to the Bureau of Landfill and Recycling Management (Bureau) within thirty (30) days of testing. HMDC shall notify the Bureau within twenty-four (24) hours if and when methane is detected at or above 25% of the lower explosive limit.

HMDC shall initiate a gas study to determine if the existing 1-E landfill gas collection systems located in the Junkyards area (NEO system) and the 1-C area (GSF system) provide an adequate measure of gas collection for the entire (400+ acres) 1-E landfill. "Adequate" shall be defined as the construction and operation of a sufficient quantity of methane control devices necessary for compliance with all federal and state regulations pertaining to the landfill gas collection. HMDC shall submit to the Bureau a schedule for completion of the gas study within 60 days of issuance of this permit.

Should additions to the existing gas collection systems be necessary, the design of the proposed system shall be submitted to the Bureau for review and approval. In addition, an Air Pollution Control permit shall be obtained prior to construction of any landfill gas collection system pursuant to N.J.A.C. 7:27-8.2(a)1.

5. Landfill Service Capacity (Revised 4/25/00)

The extent of the completed landfill shall be approximately 21 acres. Disposal of waste shall be limited to this area. Final elevations, including final cover, shall not exceed 85 feet above Mean Sea Level.

6. Soil Erosion and Sediment Control

HMDC shall comply with all requirements of the Soil Erosion and Sediment Control Plan as certified by the Hudson and Bergen County Soil Conservation Districts. All soil and sediment control practices shall be installed in their proper sequence and be regularly maintained.

7. Engineering Designs and Documents of Records (Revised 4/25/00)

The construction and operation of this facility shall be in accordance with the provisions of N.J.A.C. 7:26-1 et seq., and the following design reports and engineering plans. In case of conflict, the most recent revisions and supplemental information approved by the Department shall prevail over prior designs and submittals, and the later designs shall supersede the earlier engineering designs.

- a. North Area Class II Landfill Application dated January 1997 submitted by HMDC;
- b. Closure and Post-Closure Plan for the Hackensack Meadowlands Development Commission 1-E Landfill, dated December 1996 and prepared by Thomas Marturano, P.E., HMDC
- c. Addendum to Class II Landfill Application, dated June 16, 1997 by HMDC.
- d. Engineer's Report and Interim Final Grading Plan, dated March 20, 2000, by Thomas Marturano, P.E., HMDC.

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C. OPERATIONS, MAINTENANCE AND MONITORING

1. Inspection, Operation and Maintenance Schedules

The following shall be performed on a daily basis:

- Record quantity of leachate pumped
- Inspect leachate containment, collection and pumping systems
- Inspect methane gas pumping systems and flare(s)
- Inspect storm water sedimentation and detention basins
- Record precipitation
- Police buffer zone and site entrance for litter

The following shall be performed on a weekly basis:

- Inspect all environmental control systems
- Inspect ground water monitoring wells for damage
- Inspect the drainage swales
- Inspect leachate collection pipes, manholes and clean out risers
- Inspect pump station equipment and force main

The following shall be performed after storm events:

- Inspect all environmental control systems
- Inspect sedimentation and detention basins and surface runoff structures
- Inspect leachate collection pipes, manholes and clean out risers
- Inspect pump station equipment and force main
- Inspect the drainage swales

The following shall be performed on a quarterly basis:

- Conduct methane gas monitoring around the perimeter of the active landfill areas

The following shall be performed on an annual basis:

- Perform topographic survey of landfill
- Conduct methane gas survey around perimeter of the buffer zone of the landfill
- Inspect and test leachate collection pipes
- Inspect emergency equipment

The following shall be performed biennially:

- Survey the baseline vertical and horizontal control monuments
- Overhaul leachate pumping system

- Overhaul methane gas pumping system

Monitoring of ground water discharges shall be performed in accordance with the NJPDES regulations, N.J.A.C. 7:14A.

Inspection, operation and maintenance of other aspects of the facility shall be performed, as necessary, in order to meet the terms of this Permit and all applicable regulations in addition to the above specific listed items.

The Permittee shall record the results of the inspections in a logbook, which shall be maintained at the sanitary landfill office, and be available, at all times, for inspection by the Department. These records shall include the date and time of the inspection, the name of the inspector, a notation of observations and recommendations, and the date and nature of any repairs or other remedial action.

2. Waste Disposal Methods

The working face shall be confined to the smallest practical area, as is consistent with the proper operation of trucks and equipment, in order that the area of waste material exposed during the operating day is minimized. The maximum working face width shall not exceed 150 feet. At no time shall the area of exposed waste be greater than 15,000 square feet. The lift height of a daily cell shall not exceed 12 feet. Waste shall be compacted in two (2) foot layers. The maximum working face slope shall not exceed 3:1 (horizontal to vertical).

3. Cover Requirements

Daily and intermediate cover shall be of the types that can be workable under all weather conditions.

A sufficient quantity of cover material shall be available at all times to ensure proper operation of the landfill. At the end of each day, daily cover, consisting of at least six (6) inches of soil or alternate cover material as approved by the Department, shall be placed on areas of the solid waste workface that will be exposed for less than 24 hours.

Intermediate cover, which shall consist of at least 12 inches of soil, shall be applied to all surfaces exposed for any period exceeding 24 hours.

Final cover shall be applied within six (6) months to any area where final elevations have been reached.

4. Surface Water Control

The grade and thickness of cover material on all surfaces of the facility shall be maintained regularly so as to prevent the occurrence of ponding of water anywhere on the active landfill area except in designated stormwater control ponds. All provisions of the drainage plans as indicated in the approved engineering design shall be implemented. The channels and drainage structures shall be regularly maintained.

Any drainage of run-off from the active landfill area shall be directed to the leachate collection system.

5. Final Operations and Maintenance Manual

The approved final Operations and Maintenance manual shall be maintained at the facility. Any changes to the approved final Operations and Maintenance manual shall be submitted to the Department for review. These proposed changes shall not be implemented at the facility until the Department approves the modifications.

6. Closure and Post-Closure Plan

The Permittee shall comply with the requirements of N.J.A.C. 7:26-2A.9 for the closure and post-closure care of this facility. Failure to comply with the requirements of any closure plan approval issued from the Department may result in the revocation of this Permit.

7. Summary of Required Submittals

The following information shall be submitted to the Bureau of Landfill and Recycling Management, Division of Solid and Hazardous Waste, of this Department:

<u>Document</u>	<u>Due Date</u>
a.) Perimeter gas monitoring results	Quarterly
b.) Leachate monitoring results	Quarterly
c.) Daily precipitation summary	Quarterly
d.) Annual Topographic survey and report	Prior to May 1 in accordance with 7:26-2A.8(i)
e.) Closure and Financial Plan two-year update	Biennially

Failure to comply with any or all limitations heretofore mentioned will result in the Department seeking relief under N.J.S.A. 13:1E-1 et seq., the Solid Waste Management Act. Specifically, failure to do so may result in loss of operating authority pursuant to N.J.S.A. 13:1E-12. This Permit is contingent upon compliance with all local, state and federal laws and regulations.